## **ABSTRACT**

An array antenna apparatus (100) includes a radiating element (A0) for receiving a transmitted radio signal, two parasitic elements (A1, A2), and two variable reactance elements (12-1, 12-2) connected to the respective parasitic elements (A1, A2), and a directivity characteristic of the array antenna apparatus is changed by changing reactances set to the variable reactance elements. An antenna controller (10) selects and sets one reactance to be set from those in a first case in which a first reactance set is set to the two variable reactance elements (12-1, 12-2) and a second case in which a second reactance set is set to the two variable reactance elements (12-1, 12-2) to be able to obtain a diversity gain equal to or larger than a predetermined value, based on a received radio signal, based on signal quality of the radio signal.

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